

REMARKS TO DETAILED ACTION

This is an amendment and response to the Office Action referenced by the Examiner as mailed on September 20, 2006, for the above-captioned application. The following remarks are organized by the paragraph headings and paragraph numbers used in the "Detailed Action" section of the Examiner's Paper, beginning on page 2 therein:

Claim Rejections - 35 U.S.C. §102

The Examiner introduces 35 U.S.C. §102(b). The Examiner then rejects claims 1 through 14, as anticipated by U.S. Patent No. 3,533,810 to Shillington et al. (Shillington), as evidenced by data about methyl anthranilate found in www.thegoodscentcompany.com.

The Applicant reads that Shillington's stated purpose is to combat microorganisms, minimize oxidative deterioration, and generally improving the overall appearance and *aroma* of the product. An additional object stated by Shillington is to provide control of unfavorable *odors* in foods and "enhance" the *odor* of the treated product. There is nothing in Shillington that states its use of methyl anthranilate was intended to change the taste of a fruit. "Taste" is one of the two components of "flavor." By standard definition, "flavor" is the sensory impression of a food or other substance and is determined mainly by the chemical senses of taste and smell/aroma. The smell/aroma component is perceived by olfactory sensors within the nasal cavities, as opposed to the taste component, which is perceived by taste buds on the tongue. Since "flavor" includes aroma and taste components and these separate aspects of flavor were well known at the time of Shillington, the Examiner may not

read additional features into Shillington. Shillington fails to anticipate the required flavoring element of the Applicant's claims.

Since Shillington is silent on anticipating the flavoring results of the Applicant's claims, the Examiner looks to a recent internet listing of the physical properties of methyl anthranilate, which notes the grape flavor as a characteristic of that material. An expansion of Shillington to include the process identified in Applicant's base claim 1, may not be accomplished simply with an inherency argument, citing known properties of methyl anthranilate. These properties were well known at the time of Shillington, and Shillington failed to discuss them. Furthermore, the Applicant respectfully submits that this omission by Shillington was likely intentional, simply because the potential flavoring aspect of methyl anthranilate was at the time of Shillington, and still is, beyond the legitimate scope of the Shillington process and its stated purposes.

Shillington fails to include an *effective* disclosure of the Applicant's process, as claimed. More specifically, the "Dip" process identified in Shillington was a momentary "several second" dip in a relatively weak, 0.05% to 0.10% by weight, solution of methyl anthranilate. Such a dip will not allow for an effective absorption of the methyl anthranilate past the exocarp "skin" of pome fruit. Shillington's use of a "preserving" prophylactic solution, to impart a small "aromatic freshness," which is reportedly attributable to the methyl anthranilate as a residual effect, is not a flavoring *per se*. The Examiner employs impermissible hindsight in asserting that Shillington's goals, techniques and results can somehow be reinterpreted by simply adding the known, bare physical attributes of

methyl anthranilate, without further enablement. The Shillington process is not for the purpose of imparting the required *taste* component of flavor. It fails to include a process able to achieve such an end, and furthermore fails to suggest or teach how a flavoring result might be obtainable by somehow altering Shillington's disclosed process.

Inherency may not be established by probabilities or possibilities. There is no supporting teaching in the prior art to couple the flavoring properties of methyl anthranilate with the quick-dip preservative treatment of Shillington to render the Applicant's claims anticipated. Inherency of a property and its anticipation are entirely different questions. The mere assertion that flavoring could result from the Shillington odor imparting process is not sufficiently argued by simply adding to Shillington that methyl anthranilate has known potential flavoring properties. The Applicant's additional, claimed element of absorption of a flavor into the interior of the fruit, namely the mesocarp, is *not* established by Shillington, and not perfected by an additional recitation of a pure substance's known physical property, as evidenced by the www.thegoodscentcompany.com disclosure.

Claim Rejections - 35 U.S.C. §103

The Examiner introduces 35 U.S.C. §103(a), and the required factual inquiries applied for establishing a background for determining obviousness under 35 U.S.C. 103(a), and then rejects claims 1 through 14 as being unpatentable over U.S. Patent No. 2,967,128 to Kare (Kare), in view of the combination of U.S. Patent No. 3,669,684 to Weaver (Weaver) and U.S. Patent No. 3,427,167 to Michael (Michael).

The Applicant respectfully disagrees with the Examiner's assertion that the use of methyl anthranilate as a bird repellent as disclosed in Kare, can be used as a proper reference against the Applicant's claims. Kare's formulations are intended to serve as a preharvest repellent airborne spray. Kare's formulations are clearly non-analogous art. Kare actually teaches away from the use of methyl anthranilate as a *post-harvest* flavoring to permeate the produce. Kare admits, as the Examiner notes, that the methyl anthranilate is "unattractive to birds, but considered pleasant to humans." This statement underlines Kare's goals for the effects of methyl anthranilate, as with any other chemical repellent or pesticide, are short term, selected and designed to fully dissipate or otherwise disappear by harvest. In an additional comment, Kare offers a general, unrelated anecdotal observation that methyl anthranilate has been used "in formulating artificial food flavors used in baking and cooking." This baking and cooking use is well known, and the Applicant disagrees that this general comment somehow enables the modification of Kare's process for producing and applying a pre-harvest bird repellent airborne spray, into an effective post-harvest food flavoring process.

It is important to note that the bird repellent produced by the Kare process only treats the surface of the produce. The treatment is intentionally targeted to remain on the surface for the optimum, though temporary effect. Kare explains in detail, a mechanism in which birds taste the repellent compound treated *surfaces* of the produce, bird nests, telephone wires, or walls. The method of applying the repellent compound of Kare teaches away from the Applicant's goal of a permanent flavoring permeation. This facet of Kare is especially significant when it is noted that the compound produced by the Kare process focuses on external surface treatments. It would be counterproductive and

wasteful to permeate a bird repellent into a particular material, beyond the surface tasting abilities of the bird. The damage would be done to the material without avail, before the bird tastes the repellent.

The Examiner also asserts that Kare states that foods can be “soaked in the composition.” Respectfully, the Applicant submits that this assertion by the Examiner is not correct. When Kare refers to “sprinkling and soaking,” Kare is discussing ways to apply the repellent compound on fruit while the fruit is still on the tree (i.e. when the fruit needs protection from birds). Kare is simply describing standard field application practices typically employed for airborne chemical applications of bird repellants, or other pesticides. More specifically, soaking *with* a liquid describes a dynamic application means that is only feasible while the produce is in the field or on the tree. Conversely, soaking *in* a liquid is a static or “batch” operation, and realistically feasible only after harvest.

The Applicant also wishes to respond to Weaver ‘648, as cited by the Examiner. Weaver details how various foods can be “exposed” to various “mitigators,” to impart flavors into the foods. However, as the Examiner observes, Weaver only teaches the use of a gas chamber to achieve such results, and fails to suggest that a direct liquid contact with a mixture containing the flavoring mitigator could be utilized. Gaseous exposure is a significantly different method of exposing a solid material to a permeating agent. One skilled in the art of chemical material treatments could not reliably venture to predict the potential success of liquid permeation or “absorption,” in view of known gaseous permeation or “adsorption.” The potential efficacy of an application of methyl anthranilate by absorption, *not adsorption*, in a liquid medium is never inferred by Weaver. Weaver never even

discusses liquid medium as a potentially viable alternative to its gaseous process. As an additional issue, the Applicant notes that the 48 hour treatment periods for the effective gaseous flavorant exposure in the Weaver process is far too long for a viable industrial use. Weaver fails to teach or suggest a modification to render the process of the Applicant's claims obvious. The Examiner again employs impermissible hindsight in asserting that Weaver, without a reasonable suggestion or motivation, teaches such a modification, by way of an improper combination with the other cited patents without an appropriate basis.

In regards to Michael, the Examiner first notes that www.thegoodscentcompany.com references the fact that methyl anthranilate has grape flavor and aroma properties. However, Michael only additionally teaches the use of methyl anthranilate to "enhance" the grape flavor in grapes and grape-like products. Michael does not teach the use of methyl anthranilate to "change" the flavor of non-grape food products to a grape flavor.

The Applicant additionally asserts that the Examiner is employing the Applicant's invention as a template, to then piece together prior art disclosures to somehow render the Applicant's claims obvious. A liquid-based bird repellent, coupled with a gaseous-based fumigation chamber, then coupled with a known jam and jelly flavoring, does not illuminate the obviousness of the claimed invention as a whole, but only the points to similarities between certain elements of the claimed invention and particular features of prior art. For instance, the Applicant is somewhat puzzled by the Examiner's subjective conclusion that because grape flavoring is popular for consumers, that it would

be obvious to dip pears and apples in a solution with methyl anthranilate to make them more attractive and palatable to consumers, "especially kids." Again, the Applicant respectfully asserts that the Examiner is employing impermissible hindsight in reaching this conclusion. Although a particular potential result is highly desirable, wishing it so does *not* make an invention. An effective process must be developed to achieve the desired ends, and in the present application, the process is novel and not obvious, as it is not found in or suggested by the prior art of record.

Additionally, the Applicant has reviewed U.S. Patent No. 3,071,474 to Gross and agree that it is generally pertinent to the Applicant's disclosure, but fails to include novel elements or teach inventive steps of the Applicant's pending claims.

As to the Applicant's intervening dependent claims 2 through 14, these claims are considered patentable because they all depend from base claim 1, which is considered patentable, as discussed in detail, above. Again, a bird repellent or preservative treatment, confined to the surface of a pome fruit, or a gas chamber fumigation over an unworkable and extended period of time, no matter how combined with any other cited reference, all fail to anticipate or teach the required elements of the Applicant's process.

CONCLUSION

In view of the above remarks, the Applicants respectfully submit that the Applicants' invention, as claimed, cannot be considered anticipated, or rendered obvious in view of any of the Examiner cited references. The Examiner's arguments fail to meet the minimum level of proof, required for a proper

anticipation rejection. As discussed above, the Examiner has failed to provide a *prima facie* evidence of anticipation, as required for a proper rejection under 102(b).

Additionally, there is no provision in Kare, Weaver, Michael or in any other cited reference, for the Applicant's liquid-based, post-harvest flavoring treatment, below the skin surface of a pome fruit to render the claims obvious under 103(a). The Applicants argue that there is no reason or suggestion in the art for combining the cited references, other than the knowledge learned from the Applicant's disclosure, and more importantly, no such combination would result in the present invention.

The Applicant believes that all of the Examiner's concerns have been fully addressed and that claims 1 through 14 are allowable. The Applicant therefore respectfully requests reconsideration of the application, as presently amended. If, in the opinion of the Examiner, a telephone conference would expedite the prosecution of the application, he is invited to call Applicant's undersigned representative at (509) 453-1319.

Respectfully submitted,
Stratton Ballew PLLC



Chris E. Svendsen
Reg. N^o 40,193
213 South 12th Ave.
Yakima, WA 98902
Phone: (509) 453-1319
Fax: (509) 453-4704